



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/785,104	02/16/2001	Joseph Fjelstad	TESSERA 3.0-188 DIV	7265

530 7590 05/22/2002
LERNER, DAVID, LITTENBERG,
KRUMHOLZ & MENTLIK
600 SOUTH AVENUE WEST
WESTFIELD, NJ 07090

EXAMINER

QUINTO, KEVIN V

ART UNIT

PAPER NUMBER

2826

DATE MAILED: 05/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/785,104

Applicant(s)

FJELSTAD, JOSEPH

Examiner

Kevin Quinto

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 8-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 8-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1 and 8-16 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 12-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. In claim 12, it is stated that there is "a first portion spaced apart from said front surface by a first distance and a second portion spaced apart from said front surface by a second distance." However it is unclear to the examiner as to what surfaces of the "tip end" or "first portion" is being used to measure the "first distance" from the "tip end" or "first portion" to the "front surface." It is also unclear to the examiner as to what surfaces of the "pad end" or "second portion" is being used to measure the "second distance" from the "pad end" or "second portion" to the "front surface." Therefore the metes and bounds of the phrase "a first portion spaced apart from said front surface by a first distance and a second portion spaced apart from said front surface by a second distance" are indefinite.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

6. Claims 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Honda (JP 57121255 A).

7. So far as understood in claim 12, Honda (JP 57121255 A) discloses a similar device.

Figure 4 illustrates a microelectronic element with a body (1) defining a front surface. The leads (8A, 8B) are flexible (p. 3 of translation). The flexible leads (8A, 8B) have pad ends (not labeled) and tip ends (not labeled). The pads (2A, 2B) are exposed at the front surface. The leads are flexible (p. 3 of translation) and are understood to be independently movable with respect to the body. The leads (8A, 8B) are spaced apart from the front surface of the body (1). Both of the leads (8A, 8B) of figure 4 have two substantially flat main surfaces. Both of the leads (8A, 8B) have a first main surface which faces the body and a second main surface which faces away from the body. The tip ends project over the front surface of the body (1). The highest top surface of the lead (8A, 8B) has been interpreted to be the first portion or tip end. Each lead (8A, 8B) has a first portion or tip end which is separated from the front surface at a

Art Unit: 2826

first distance. Each lead (8A, 8B) also has a second portion or pad end which is separated from the front surface at a second distance. The bottom surface of the lead in contact with the pad has been interpreted to be the second portion or pad end. Thus the first distance is greater than the second distance.

8. So far as understood in claims 13 and 14, Honda discloses that the body (1) is an IC chip. In addition, figure 4 of Honda shows that the chip (1) has a central region and a peripheral region where the pads (2A, 2B) are in a peripheral region of the chip (1). The leads (8A, 8B) extend over the central region of the chip (1).

9. Claims 12-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Dozier, II et al. (USPN 5,772,451).

10. So far as understood in claim 12, Dozier, II et al. (USPN 5,772,451, hereinafter referred to as the "Dozier" reference) discloses a similar device. Figure 2C illustrates a microelectronic element with a body (240) defining a front surface. The leads (231, 232, 233, 234, 235, 236) are flexible or elastic (column 5, lines 55-60). The flexible leads (231, 232, 233, 234, 235, 236) have pad ends (231a, 232a, 233a, 234a, 235a, 236a) and tip ends (231b, 232b, 233b, 234b, 235b, 236b). The pads (not labeled) are exposed at the front surface. The leads are flexible or elastic (column 5, lines 55-60) and are understood to be independently movable with respect to the body. The leads (231, 232, 233, 234, 235, 236) are spaced apart from the front surface of the body (240). The tip ends (231b, 232b, 233b, 234b, 235b, 236b) project over the front surface of the body (240). The highest top surface of the lead (231, 232, 233, 234, 235, 236) has been interpreted to be the first portion or tip end (231b, 232b, 233b, 234b, 235b, 236b). Each lead (231, 232, 233, 234, 235, 236) has a first portion or tip end (231b, 232b, 233b, 234b, 235b, 236b)

Art Unit: 2826

which is separated from the front surface at a first distance. Each lead (231, 232, 233, 234, 235, 236) also has a second portion or pad end (231a, 232a, 233a, 234a, 235a, 236a) which is separated from the front surface at a second distance. The bottom surface of the lead in contact with the pad has been interpreted to be the second portion or pad end (231a, 232a, 233a, 234a, 235a, 236a). Thus the first distance is greater than the second distance. Although the leads of figure 2C are not shown to have flat main surfaces, Dozier discloses that the leads may also have a flat elongated shape (column 35, lines 19-21). Thus the leads of Dozier in figure 2C can also have a first main surface which faces the body and a second main surface which faces away from the body.

11. So far as understood in claims 13 and 16, Dozier discloses that the body (240) is an electronic component such as a probe card insert (column 18, lines 1-30).

12. So far as understood in claim 14, figure 2C of Dozier illustrates that the chip has a central region and a peripheral region where the pads are in a peripheral region of the chip. The leads (231, 232, 233, 234, 235, 236) extend over the central region of the chip.

13. So far as understood in claim 15, figure 2C does not illustrate that the body is a wafer with a plurality of semiconductor chips. However Dozier discloses that the body can be a semiconductor wafer (column 16, lines 28-36). It is understood that the wafer includes a plurality of semiconductor chips.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2826

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 1 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dozier, II et al. (USPN 5,772,451) in view of Khandros et al. (USPN 5,148,266).

16. In reference to claim 1, Dozier discloses a similar device. Figure 2C illustrates a microelectronic element with a body (240) defining a front surface. There are flexible leads (231, 232, 233, 234, 235, 236) which have pad ends (231a, 232a, 233a, 234a, 235a, 236a) and tip ends (231b, 232b, 233b, 234b, 235b, 236b). The pads (not labeled) are exposed at the front surface. The leads are flexible or elastic (column 5, lines 55-60) and are understood to be independently movable with respect to the body. The leads (231, 232, 233, 234, 235, 236) are spaced apart from the front surface of the body (240). The tip ends (231b, 232b, 233b, 234b, 235b, 236b) project over the front surface of the body (240). Dozier does not explicitly state that the leads can be curved in a plane parallel to the front surface of the body (240). However it is well known in the art to curve leads in such a manner. Khandros et al. (USPN 5,148,266, hereinafter referred to as the "Khandros" reference) discloses that leads which are "curved in directions parallel to the face" of the body have "increased flexibility." Dozier discloses that flexible or elastic leads are desirable (column 5, lines 55-60). It would therefore be obvious to curve the leads in a plane parallel to the front surface of the body (240) in the device of Dozier.

17. In reference to claims 8 and 11, Dozier discloses that the body (240) is an electronic component such as a probe card insert (column 18, lines 1-30).

Art Unit: 2826

18. In reference to claim 9, figure 2C of Dozier illustrates that the chip has a central region and a peripheral region where the pads are in a peripheral region of the chip. The leads (231, 232, 233, 234, 235, 236) extend over the central region of the chip.

19. In reference to claim 10, figure 2C does not illustrate that the body is a wafer with a plurality of semiconductor chips. However Dozier discloses that the body can be a semiconductor wafer (column 16, lines 28-36). It is understood that the wafer includes a plurality of semiconductor chips.

20. Claims 1, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda (JP 57121255 A) in view of Khandros et al. (USPN 5,148,266)

21. In reference to claim 1, Honda (JP 57121255 A) discloses a similar device. Figure 4 illustrates a microelectronic element with a body (1) defining a front surface. There are flexible leads (8A, 8B) which have pad ends (not labeled) and tip ends (not labeled). The pads (2A, 2B) are exposed at the front surface. The leads are flexible (p. 3 of translation) and are understood to be independently movable with respect to the body (1). The leads (8A, 8B) are spaced apart from the front surface of the body (1). The tip ends project over the front surface of the body (1). Honda does not explicitly state that the leads can be curved in a plane parallel to the front surface of the body (1). However it is well known in the art to curve leads in such a manner. Khandros (USPN 5,148,266) discloses that leads which are "curved in directions parallel to the face" of the body have "increased flexibility." Honda discloses that flexible leads are desirable because they absorb thermal deformation strain (p. 3 of translation). It would therefore be obvious to curve the leads in a plane parallel to the front surface of the body (1) in the device of Honda.

Art Unit: 2826

22. In reference to claims 8 and 9, Honda discloses that the body (1) is an IC chip. In addition, figure 4 of Honda shows that the chip (1) has a central region and a peripheral region where the pads (2A, 2B) are in a peripheral region of the chip (1). The leads (8A, 8B) extend over the central region of the chip (1).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Quinto whose telephone number is (703) 306-5688. The examiner can normally be reached on M-F 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (703) 308-6601. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

NATHAN J. FLYNN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800
KVVQ
May 18, 2002

